

Notice of Allowability

Application No.

10/711,085

Examiner

Dharti H. Patel

Applicant(s)

GAUTHIER, JR. ET AL.

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an amendment on 03/31/2006.
2. ☒ The allowed claim(s) is/are 1-6 and 8-15.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08);
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

The following is an examiner's statement of reasons for indicating allowance of claim 1: The prior art teaches an ESD protection power clamp for suppressing ESD events comprising an FET having drain and source connections connected across power supply terminals of an integrated circuit; an RC timing circuit connected between the power supply terminals, an inverter circuit having a plurality stages connected between said power supply terminals, but does not disclose a feedback FET having a drain and source connected in series with one stage of said inverter circuit and said power supply terminals, and having a gate connection connected to said FET gate connection, whereby during an ESD event, said feedback FET provides dynamic feedback preventing said gate connection from latching said FET for clamping the voltage on said terminals into a conducting mode when power supply potential is applied across said terminals. This feature in combination with the rest of the claim limitations is not anticipated or rendered obvious by the prior art of record.

The following is an examiner's statement of reasons for indicating allowance of claim 8: The prior art teaches an ESD protection power clamp for suppressing ESD events comprising an FET having drain and source connection connected across power supply terminals, an RC timing circuit connected between the power supply terminals; an inverter circuit comprising first, second and third stages of pull-up and pull-down transistors connected in tandem, but does not disclose a feedback transistor connected in series with said second stage pull up transistor, and having a gate connection connected to said FET gate connection, wherein during a power event where normal power supply voltage is applied to said power supply terminals, said feedback transistor

prevents said FET from latching into a clamping mode. This feature in combination with the rest of the claim limitations is not anticipated or rendered obvious by the prior art of record.

The following is an examiner's statement of reasons for indicating allowance of claim 11: The prior art teaches an ESD protection power clamp for suppressing ESD events comprising an FET having drain and source connection connected across power supply terminals, an RC timing circuit connected between the power supply terminals, an inverter circuit comprising first and second stages of pull-up and pull-down transistors connected in tandem, but does not disclose a first feedback transistor having a gate connected to said gate connection of said FET and having a source and drain connected in series with a pull-up transistor of said first stage of preventing said FET from latching into a clamping mode; and a second feedback transistor having source and drain connections connected across said serial connection of said first transistor and said pull-up transistor, said second feedback transistor reducing power consumption during a power up of said power supply voltage. This feature in combination with the rest of the claim limitations is not anticipated or rendered obvious by the prior art of record.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dharti H. Patel whose telephone number is 571-272-8659. The examiner can normally be reached on 8:30am - 5pm.

Art Unit: 2836

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800, Ext. 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DHP
04/08/2006



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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800